

WHAT IS CLAIMED IS:

1. A method for generating a wobble clock signal, comprising:

generating a wobble clock signal according to a wobble signal, wherein the wobble signal is generated when an optical disc is processed;

5 comparing a width of the wobble signal at different status with an average; and

generating the wobble clock signal according to either one of the following:

continuously generating the wobble clock signal according to the wobble signal;

and

generating the wobble clock signal by feedbacking the wobble signal back itself.

10 2. The method for generating the wobble clock signal of claim 1, wherein the step of generating the wobble clock signal according to the result of comparing the width of the wobble signal at different status with the average, further comprises:

counting the width of the wobble signal at different status, so as to generate a plurality of counting data;

15 generating a plurality of comparison data according to a relationship between the counting data and the average; and

determining whether or not to select the wobble clock signal and feedback the wobble clock signal back to generate the wobble clock signal, according to whether the comparison data is beyond a predetermined range or not.

20 3. The method for generating the wobble clock signal of claim 2, further comprising:

enabling a deformation signal, when the comparison data is beyond the predetermined range; and

feedbacking the wobble clock signal back to generate a new wobble clock signal by replacing the original wobble clock signal, when a number of continuously enabling the deformation signal is beyond a predetermined value.

5 4. The method for generating the wobble clock signal of claim 2, wherein the average is obtained by averaging the counting data.

5. The method for generating the wobble clock signal of claim 1, wherein the wobble signal is processed by a fake signal removing process in advance.

6. A method for generating a wobble clock signal, comprising:
counting a width of a wobble signal at different status which is generated when an
10 optical disc is processed and generating a plurality of counting data; and
generating a wobble clock signal according to an average of the counting data.

7. The method for generating the wobble clock signal of claim 6, further comprising:

generating an average clock signal according to the average; and
15 generating the wobble clock signal by dividing a frequency of the average clock signal by N, wherein N is a positive integer.

8. The method for generating the wobble clock signal of claim 7, wherein the average is an average of half cycle of the wobble signal.

9. The method for generating the wobble clock signal of claim 6, further
20 comprising:

feedbacking the wobble clock signal back to re-generate the wobble clock signal by replacing the original wobble clock signal, when either a defect is found on an optical disc or the wobble signal becomes deformed.

10. The method for generating the wobble clock signal of claim 9, wherein whether or not the wobble signal becomes deformed is determined by the steps comprising:

counting the width of the wobble signal at different status, so as to generate a plurality of counting data;

generating a plurality of comparison data according to a relationship between each of the counting data and an average; and

determining whether or not to select the wobble clock signal and feedback the wobble clock signal back to generate the wobble clock signal according to whether the comparison data is beyond a predetermined range or not.

11. The method for generating the wobble clock signal of claim 10, further comprising:

enabling a deformation signal when the comparison data is beyond the predetermined range; and

selecting the wobble clock signal and feedbacking the wobble clock signal back to generate the wobble clock signal when a number of continuously enabling the deformation signal is beyond a predetermined value.

12. The method for generating the wobble clock signal of claim 10, wherein the average is the average of half cycle of the wobble signal.

13. The method for generating the wobble clock signal of claim 6, wherein the wobble signal is processed by a fake signal removing process in advance.

14. An apparatus for generating a wobble clock signal, comprising:

a clock signal generating circuit, for selecting one of a wobble signal, which is generated when an optical disc is processed, and a signal, which is fed back from the wobble clock signal, so as to generate the wobble clock signal; and

a selection circuit, electrically coupled to the clock signal generating circuit for receiving the wobble signal and the signal fed back from the wobble clock signal, and for determining whether or not to allow the clock generating circuit to select the wobble clock signal and feedback the wobble clock signal back to generate the wobble clock signal itself according to at least an enabling signal.

15. The apparatus for generating the wobble clock signal of claim 14, further comprising a deformation detecting module for receiving the wobble signal, and for determining whether or not to output a deformation enabling signal according to a result of comparing a width of the wobble signal on different status with an average.

16. The apparatus for generating the wobble clock signal of claim 15, wherein the deformation detecting module comprises:

a first counter for counting the width of the wobble signal at different status so as to generate a plurality of counting data; and

a comparator electrically coupled to the first counter for comparing the counting data with the average so as to obtain a plurality of comparison data, wherein when the comparison data is beyond a predetermined range, the comparator generates a deformation signal, and the deformation detecting module determines whether or not to output the deformation enabling signal according to the deformation signal.

17. The apparatus for generating the wobble clock signal of claim 16, wherein the deformation detecting module further comprises a deformation signal counting circuit electrically coupled to the comparator for counting a number of continuously outputting

the deformation signal, when the number of continuously outputting the deformation signal is greater than the average of the counting data, the deformation detecting module generates the deformation enabling signal.

18. The apparatus for generating the wobble clock signal of claim 14, wherein the
5 feedback signal generating circuit comprises:

a second counter electrically coupled to the selection circuit, wherein the selection circuit receives the wobble signal and the wobble clock signal, selects and sends one of the signals to the second counter, and the second counter is used to count a width at different status of the signal input by the selection signal so as to generate a plurality of
10 counting data;

a low-pass filter electrically coupled to the second counter for generating an average clock signal by averaging the counting data; and

a clock signal generating circuit electrically coupled to the low-pass filter for generating the wobble clock signal by dividing a frequency of the average clock signal by
15 N , wherein N is a positive integer.

19. The apparatus for generating the wobble clock signal of claim 18, wherein the clock generating circuit further comprises a pregroove absolute-time decoding circuit electrically coupled to the selection circuit, the second counter, and the low-pass filter respectively for generating a pregroove absolute time data according to the counting data,
20 the average clock signal, and one of the wobble signal and the wobble clock signal.

20. The apparatus for generating the wobble clock signal of claim 14, wherein the selection circuit comprises:

a multiplexer for receiving the wobble signal and the signal fed back from the wobble clock signal, wherein the multiplexer is electrically coupled to the clock signal

generating circuit for selecting and outputting one of the wobble signal and the signal fed back from the wobble clock signal to the clock signal generating circuit; and

an OR gate for receiving the deformation enabling signal and a defect enabling signal which is generated when a defect is found on the recordable optical disc, and when
5 at least one of the deformation enabling signal and the defect enabling signal is enabled, causing the multiplexer to select and send the signal fed back from the wobble clock signal to the clock signal generating circuit.